



**Employees' Retirement Plan**

Chicago Transit Authority  
Employees' Retirement Plan  
Performance Summary

**December 31, 2019**

# Total Fund Composite

Market Value: \$1,876.7 Million and 100.0% of Fund

Ending December 31, 2019

	Asset Class	Market Value	3 Mo Net Cash Flows	% of Portfolio	Policy %	Policy Difference
<b>Total Fund Composite</b>		<b>\$1,876,665,797</b>	<b>-\$26,348,984</b>	<b>100.0%</b>	<b>100.0%</b>	<b>\$0</b>
<b>Total Fixed Income Composite</b>		<b>\$315,763,480</b>	<b>-\$6,098,562</b>	<b>16.8%</b>	<b>17.0%</b>	<b>-\$3,269,705</b>
<b>U.S. Fixed Income Composite</b>		<b>\$167,266,124</b>	<b>-\$150,209</b>	<b>8.9%</b>	<b>9.0%</b>	<b>-\$1,633,798</b>
Rhumblin Core Bond Pooled Index Fund	Core Fixed Income	\$52,241,633	-\$3,125	2.8%		
Baird Advisors	Core Fixed Income	\$57,711,829	-\$63,205	3.1%		
Amalgatrust	Core Plus Fixed Income	\$57,312,662	-\$83,878	3.1%		
<b>Stable Value Composite</b>		<b>--</b>	<b>-\$5,678,045</b>	<b>--</b>	<b>0.0%</b>	<b>\$0</b>
Goode	Stable Value	\$0	-\$5,678,045	0.0%		
<b>Bank Loans Composite</b>		<b>\$40,534,900</b>	<b>\$0</b>	<b>2.2%</b>	<b>2.0%</b>	<b>\$3,001,584</b>
Symphony	Senior Secured Loans	\$40,534,900	\$0	2.2%		
<b>Global Fixed Income Composite</b>		<b>\$107,962,457</b>	<b>-\$270,308</b>	<b>5.8%</b>	<b>6.0%</b>	<b>-\$4,637,491</b>
Franklin Templeton Global Bond	Global Fixed Income	\$51,119,182	-\$179,844	2.7%		
MetLife Investment Management EMD	EM Fixed Income	\$56,843,275	-\$90,464	3.0%		
<b>Total Equity Composite</b>		<b>\$868,441,606</b>	<b>-\$8,951,960</b>	<b>46.3%</b>	<b>49.0%</b>	<b>-\$51,124,635</b>
<b>U.S. Equity Composite</b>		<b>\$528,522,216</b>	<b>-\$7,816,680</b>	<b>28.2%</b>	<b>28.0%</b>	<b>\$3,055,793</b>
<b>Large Cap Equity Composite</b>		<b>\$338,727,596</b>	<b>-\$7,369,197</b>	<b>18.0%</b>	<b>18.0%</b>	<b>\$927,752</b>
Rhumblin Russell 1000 Value	Large-Cap Value	\$44,502,604	-\$7,003,125	2.4%		
Edgar Lomax	Large-Cap Value	\$75,399,445	-\$181,351	4.0%		
Paradigm	Large-Cap Value	\$80,134,106	-\$180,062	4.3%		
Northern Trust S&P 500	Large-Cap Core	\$138,691,441	-\$4,658	7.4%		
<b>Mid Cap Equity Composite</b>		<b>\$98,623,918</b>	<b>-\$210,850</b>	<b>5.3%</b>	<b>5.0%</b>	<b>\$4,790,628</b>
Denali	Mid-Cap Value	\$64,026,761	-\$208,324	3.4%		
Xponance S&P 400 Index	Mid-Cap Core	\$34,597,157	-\$2,526	1.8%		
<b>Small Cap Equity Composite</b>		<b>\$91,170,703</b>	<b>-\$236,633</b>	<b>4.9%</b>	<b>5.0%</b>	<b>-\$2,662,587</b>
Ariel	Small-Cap Value	\$48,338,740	-\$106,842	2.6%		
Channing	Small-Cap Value	\$26,689,740	-\$126,666	1.4%		
Rhumblin S&P 600	Small-Cap Core	\$16,142,223	-\$3,125	0.9%		
<b>Non-U.S. Equity Composite</b>		<b>\$339,919,390</b>	<b>-\$1,135,280</b>	<b>18.1%</b>	<b>21.0%</b>	<b>-\$54,180,428</b>
Northern Trust ACWI ex US	Non-U.S. Large-Cap Core	\$33,160,210	-\$9,741	1.8%		
Brown Capital	Non-U.S. Large-Cap Core	\$104,195,122	-\$556,043	5.6%		
LSV	Non-U.S. Small-Cap Core	\$53,764,532	-\$239,626	2.9%		
Northern Trust Emerging Markets	Emerging Markets	\$37,545,291	-\$17,376	2.0%		
ARGA Emerging Markets Equity	Emerging Markets	\$62,448,958	-\$121,283	3.3%		
J O Hambro EM Small Cap Fund	EM Small-Cap	\$48,805,277	-\$191,212	2.6%		
<b>Cash Composite</b>		<b>\$19,692,586</b>	<b>-\$5,164,408</b>	<b>1.0%</b>	<b>--</b>	<b>\$19,692,586</b>

## Total Fund Composite

Market Value: \$1,876.7 Million and 100.0% of Fund

Ending December 31, 2019

	Asset Class	Market Value	3 Mo Net Cash Flows	% of Portfolio	Policy %	Policy Difference
<b>Hedge Fund Composite</b>		<b>\$105,302,859</b>	<b>-\$10,529,240</b>	<b>5.6%</b>	<b>7.0%</b>	<b>-\$26,063,746</b>
Pluscios	Multi-Strat. Hedge FoF	\$31,586,634	-\$10,529,240	1.7%		
Magnitude Capital	Multi-Strat. Hedge FoF	\$60,211,110	\$0	3.2%		
Graham Absolute Return	Hedged Equity Hedge FoF	\$13,069,401	\$0	0.7%		
<b>Real Estate Composite</b>		<b>\$243,726,561</b>	<b>-\$1,775,183</b>	<b>13.0%</b>	<b>12.0%</b>	<b>\$18,526,665</b>
<b>Open-End Real Estate Composite</b>		<b>\$209,022,619</b>	<b>-\$1,360,152</b>	<b>11.1%</b>	<b>--</b>	<b>\$209,022,619</b>
Heitman America Real Estate	Core Real Estate	\$40,507,773	-\$99,902	2.2%		
JPMorgan Strategic Property Fund	Core Real Estate	\$51,048,066	-\$437,833	2.7%		
PRISA I	Core Real Estate	\$49,231,395	-\$542,021	2.6%		
Rreef America II	Core Real Estate	\$16,246,042	-\$171,193	0.9%		
UBS Trumbull Property Fund	Core Real Estate	\$51,989,344	-\$109,202	2.8%		
<b>Closed-End Real Estate Composite</b>		<b>\$34,703,942</b>	<b>-\$415,031</b>	<b>1.8%</b>	<b>--</b>	<b>\$34,703,942</b>
<b>Infrastructure Composite</b>		<b>\$106,477,576</b>	<b>\$3,380,988</b>	<b>5.7%</b>	<b>5.0%</b>	<b>\$12,644,286</b>
FlexShares STOXX Global Broad Infrastructure Index Fund	Publicly-Traded Infrastructure	\$52,672,980	-\$310,529	2.8%		
IFM Global Infrastructure L.P.	Core Infrastructure	\$53,804,596	\$3,691,517	2.9%		
<b>Private Equity Composite</b>		<b>\$217,261,128</b>	<b>\$2,789,382</b>	<b>11.6%</b>	<b>10.0%</b>	<b>\$29,594,548</b>
<b>Open-End Private Equity Composite</b>		<b>\$81,839,620</b>	<b>-\$1,615,030</b>	<b>4.4%</b>	<b>--</b>	<b>\$81,839,620</b>
Partners Group Private Equity Master Fund LLC	U.S. Divers. Private Equity	\$57,110,220	-\$1,615,030	3.0%		
Partners Group Private Equity CIT	Private Equity Co-Investment	\$24,729,400	\$0	1.3%		

# Investment Manager

# Annualized Performance (Net of Fees)

Market Value: \$1,876.7 Million and 100.0% of Fund

Ending December 31, 2019

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
<b>Total Fund Composite</b>	<b>2.7%</b>	<b>5.3%</b>	<b>15.7%</b>	<b>15.7%</b>	<b>5.7%</b>	<b>8.5%</b>	<b>8.1%</b>	<b>6.3%</b>	<b>7.8%</b>	<b>7.7%</b>	<b>8.2%</b>	<b>Dec-90</b>
<i>Total Fund Policy Benchmark</i>	2.3%	5.2%	16.1%	16.1%	5.8%	8.5%	8.0%	6.5%	8.2%	8.2%	--	Dec-90
<i>Actuarial Rate</i>	0.7%	2.0%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.4%	8.5%	Dec-90
<b>Total Fixed Income Composite</b>	<b>1.1%</b>	<b>1.3%</b>	<b>8.1%</b>	<b>8.1%</b>	<b>3.5%</b>	<b>3.8%</b>	<b>4.0%</b>	<b>3.0%</b>	<b>2.5%</b>	<b>3.1%</b>	<b>4.3%</b>	<b>Mar-00</b>
<i>BBgBarc US Aggregate TR</i>	-0.1%	0.2%	8.7%	8.7%	4.3%	4.0%	3.7%	3.0%	2.7%	3.7%	5.0%	Mar-00
<b>U.S. Fixed Income Composite</b>	<b>-0.1%</b>	<b>0.1%</b>	<b>9.1%</b>	<b>9.1%</b>	<b>4.3%</b>	<b>4.1%</b>	<b>3.5%</b>	<b>2.9%</b>	<b>2.6%</b>	<b>3.6%</b>	<b>4.5%</b>	<b>Mar-00</b>
<i>BBgBarc US Aggregate TR</i>	-0.1%	0.2%	8.7%	8.7%	4.3%	4.0%	3.7%	3.0%	2.7%	3.7%	5.0%	Mar-00
Rhumblin Core Bond Pooled Index Fund	-0.1%	0.0%	8.5%	8.5%	--	--	--	--	--	--	5.8%	Mar-18
<i>BBgBarc US Aggregate TR</i>	-0.1%	0.2%	8.7%	8.7%	4.3%	4.0%	3.7%	3.0%	2.7%	3.7%	5.8%	Mar-18
Baird Advisors	0.0%	0.2%	9.2%	9.2%	4.4%	4.4%	4.3%	3.5%	3.2%	4.4%	4.4%	Aug-09
<i>BBgBarc US Aggregate TR</i>	-0.1%	0.2%	8.7%	8.7%	4.3%	4.0%	3.7%	3.0%	2.7%	3.7%	3.7%	Aug-09
Amalgatrast	0.0%	0.2%	9.4%	9.4%	4.5%	4.3%	--	--	--	--	2.9%	Jun-16
<i>BBgBarc US Aggregate TR</i>	-0.1%	0.2%	8.7%	8.7%	4.3%	4.0%	3.7%	3.0%	2.7%	3.7%	2.7%	Jun-16
<b>Stable Value Composite</b>	<b>0.2%</b>	<b>0.5%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.2%</b>	<b>1.8%</b>	<b>2.9%</b>	<b>Jun-01</b>
<i>91 Day T-Bills</i>	0.1%	0.4%	2.1%	2.1%	2.0%	1.6%	1.3%	1.1%	0.8%	0.6%	1.3%	Jun-01
Goode	0.2%	0.5%	1.8%	1.8%	1.8%	1.8%	1.6%	1.5%	1.5%	1.8%	2.6%	Dec-02
<i>91 Day T-Bills</i>	0.1%	0.4%	2.1%	2.1%	2.0%	1.6%	1.3%	1.1%	0.8%	0.6%	1.3%	Dec-02
<b>Bank Loans Composite</b>	<b>1.8%</b>	<b>1.8%</b>	<b>7.9%</b>	<b>7.9%</b>	<b>3.8%</b>	<b>3.7%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.4%</b>	<b>Jul-16</b>
<i>CSFB Leveraged Loan</i>	1.6%	1.7%	8.2%	8.2%	4.6%	4.5%	5.8%	4.5%	4.4%	5.2%	5.1%	Jul-16
Symphony	1.8%	1.8%	7.9%	7.9%	3.8%	3.7%	--	--	--	--	4.4%	Jul-16
<i>CSFB Leveraged Loan</i>	1.6%	1.7%	8.2%	8.2%	4.6%	4.5%	5.8%	4.5%	4.4%	5.2%	5.1%	Jul-16
<b>Global Fixed Income Composite</b>	<b>2.6%</b>	<b>2.9%</b>	<b>7.2%</b>	<b>7.2%</b>	<b>2.2%</b>	<b>3.8%</b>	<b>5.2%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.8%</b>	<b>Jul-15</b>
<i>BBgBarc Global Aggregate TR</i>	0.6%	0.5%	6.8%	6.8%	2.7%	4.3%	3.7%	2.3%	1.3%	2.5%	3.3%	Jul-15
Franklin Templeton Global Bond	1.6%	1.1%	0.9%	0.9%	1.4%	1.6%	2.7%	--	--	--	1.6%	Jul-15
<i>BBgBarc Global Aggregate TR</i>	0.6%	0.5%	6.8%	6.8%	2.7%	4.3%	3.7%	2.3%	1.3%	2.5%	3.3%	Jul-15
MetLife Investment Management EMD	3.4%	4.5%	13.8%	13.8%	2.8%	5.9%	7.7%	--	--	--	5.9%	Jul-15
<i>JP Morgan EMBI Global TR</i>	1.9%	2.1%	14.4%	14.4%	4.5%	6.1%	7.1%	5.9%	4.0%	6.6%	6.2%	Jul-15

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$1,876.7 Million and 100.0% of Fund

Ending December 31, 2019

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
<b>Total Equity Composite</b>	<b>3.5%</b>	<b>8.7%</b>	<b>24.7%</b>	<b>24.7%</b>	<b>5.3%</b>	<b>10.9%</b>	<b>10.5%</b>	<b>7.4%</b>	<b>10.0%</b>	<b>9.6%</b>	<b>5.2%</b>	<b>Mar-00</b>
MSCI ACWI	3.5%	9.0%	26.6%	26.6%	7.1%	12.4%	11.3%	8.4%	9.7%	8.8%	4.5%	Mar-00
<b>U.S. Equity Composite</b>	<b>2.6%</b>	<b>7.7%</b>	<b>27.6%</b>	<b>27.6%</b>	<b>8.2%</b>	<b>11.4%</b>	<b>11.9%</b>	<b>8.6%</b>	<b>12.2%</b>	<b>11.8%</b>	<b>6.2%</b>	<b>Mar-00</b>
Russell 3000	2.9%	9.1%	31.0%	31.0%	11.4%	14.6%	14.1%	11.2%	14.4%	13.4%	6.2%	Mar-00
<b>Large Cap Equity Composite</b>	<b>2.7%</b>	<b>7.9%</b>	<b>28.0%</b>	<b>28.0%</b>	<b>9.8%</b>	<b>13.2%</b>	<b>12.8%</b>	<b>9.7%</b>	<b>13.4%</b>	<b>12.3%</b>	<b>5.8%</b>	<b>Mar-00</b>
Russell 1000	2.9%	9.0%	31.4%	31.4%	11.9%	15.0%	14.3%	11.5%	14.6%	13.5%	6.1%	Mar-00
Rhumblin Russell 1000 Value	2.7%	7.4%	26.4%	26.4%	--	--	--	--	--	--	10.7%	Mar-18
Russell 1000 Value	2.8%	7.4%	26.5%	26.5%	7.7%	9.7%	11.5%	8.3%	12.2%	11.8%	10.7%	Mar-18
Edgar Lomax	1.9%	6.5%	25.1%	25.1%	9.9%	12.9%	13.9%	9.8%	13.6%	12.8%	8.2%	Apr-00
S&P 500 Value	3.1%	9.9%	31.9%	31.9%	9.6%	11.5%	12.9%	9.5%	12.9%	12.2%	6.4%	Apr-00
Paradigm	2.8%	7.4%	25.6%	25.6%	7.6%	10.4%	10.5%	7.9%	12.4%	11.9%	7.4%	Apr-00
Russell 1000 Value	2.8%	7.4%	26.5%	26.5%	7.7%	9.7%	11.5%	8.3%	12.2%	11.8%	7.2%	Apr-00
Northern Trust S&P 500	3.0%	9.1%	31.5%	31.5%	12.2%	15.3%	14.5%	--	--	--	12.6%	Jul-15
S&P 500	3.0%	9.1%	31.5%	31.5%	12.1%	15.3%	14.4%	11.7%	14.7%	13.6%	12.5%	Jul-15
<b>Mid Cap Equity Composite</b>	<b>2.1%</b>	<b>6.1%</b>	<b>28.5%</b>	<b>28.5%</b>	<b>6.5%</b>	<b>9.9%</b>	<b>10.6%</b>	<b>8.0%</b>	<b>12.2%</b>	<b>11.4%</b>	<b>5.5%</b>	<b>Mar-00</b>
Russell MidCap	2.3%	7.1%	30.5%	30.5%	9.0%	12.1%	12.5%	9.3%	13.2%	13.2%	8.6%	Mar-00
Denali	1.8%	5.6%	26.3%	26.3%	4.4%	7.3%	10.4%	8.2%	12.9%	12.1%	13.1%	Oct-09
Russell MidCap Value	3.0%	6.4%	27.1%	27.1%	5.6%	8.1%	11.0%	7.6%	12.0%	12.4%	13.3%	Oct-09
Xponance S&P 400 Index	2.8%	7.0%	--	--	--	--	--	--	--	--	6.9%	Jun-19
S&P 400 MidCap	2.8%	7.1%	26.2%	26.2%	5.9%	9.3%	12.0%	9.0%	12.3%	12.7%	7.0%	Jun-19
<b>Small Cap Equity Composite</b>	<b>2.9%</b>	<b>8.6%</b>	<b>25.5%</b>	<b>25.5%</b>	<b>3.7%</b>	<b>6.3%</b>	<b>10.3%</b>	<b>6.2%</b>	<b>9.8%</b>	<b>11.0%</b>	<b>8.1%</b>	<b>Mar-00</b>
Russell 2000	2.9%	9.9%	25.5%	25.5%	5.7%	8.6%	11.6%	8.2%	11.6%	11.8%	7.3%	Mar-00
Ariel	2.9%	9.2%	27.0%	27.0%	4.8%	8.0%	11.1%	6.5%	10.5%	11.0%	13.4%	Jan-91
Russell 2000 Value	3.5%	8.5%	22.4%	22.4%	3.3%	4.8%	10.9%	7.0%	10.1%	10.6%	11.5%	Jan-91
Channing	2.9%	7.7%	24.7%	24.7%	1.5%	3.2%	8.9%	5.9%	9.8%	11.2%	11.8%	Dec-09
Russell 2000 Value	3.5%	8.5%	22.4%	22.4%	3.3%	4.8%	10.9%	7.0%	10.1%	10.6%	11.3%	Dec-09
Rhumblin S&P 600	3.0%	8.2%	22.6%	22.6%	--	--	--	--	--	--	6.4%	Mar-18
S&P 600 SmallCap	3.0%	8.2%	22.8%	22.8%	6.0%	8.4%	12.6%	9.6%	13.0%	13.4%	6.5%	Mar-18

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$1,876.7 Million and 100.0% of Fund

Ending December 31, 2019

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
<b>Non-U.S. Equity Composite</b>	<b>5.0%</b>	<b>10.5%</b>	<b>20.5%</b>	<b>20.5%</b>	<b>1.3%</b>	<b>10.3%</b>	<b>8.6%</b>	<b>5.9%</b>	<b>5.4%</b>	<b>4.9%</b>	<b>3.9%</b>	<b>Mar-00</b>
MSCI ACWI ex USA	4.3%	8.9%	21.5%	21.5%	2.1%	9.9%	8.5%	5.5%	5.4%	5.0%	3.8%	Mar-00
Northern Trust ACWI ex US	4.2%	8.8%	21.7%	21.7%	2.5%	10.1%	8.8%	--	--	--	7.7%	Aug-15
MSCI ACWI exUS IMI	4.4%	9.3%	22.2%	22.2%	2.3%	10.4%	9.0%	6.2%	6.1%	5.7%	8.0%	Aug-15
Brown Capital	2.0%	7.4%	22.8%	22.8%	4.1%	10.6%	6.1%	6.5%	8.4%	7.0%	7.2%	Nov-09
MSCI EAFE	3.2%	8.2%	22.0%	22.0%	2.6%	9.6%	7.4%	5.7%	6.3%	5.5%	5.6%	Nov-09
LSV	5.9%	13.2%	22.9%	22.9%	-1.4%	9.7%	9.6%	--	--	--	8.1%	Jul-15
MSCI EAFE Small Cap	4.4%	11.5%	25.0%	25.0%	1.3%	10.9%	8.7%	8.9%	9.4%	8.7%	7.5%	Jul-15
Northern Trust Emerging Markets	7.5%	11.6%	18.3%	18.3%	0.4%	11.3%	11.2%	5.4%	--	--	4.3%	Nov-14
MSCI Emerging Markets	7.5%	11.8%	18.4%	18.4%	0.6%	11.6%	11.5%	5.6%	3.3%	3.7%	4.5%	Nov-14
ARGA Emerging Markets Equity	7.6%	14.7%	18.9%	18.9%	4.0%	--	--	--	--	--	5.8%	Oct-17
MSCI Emerging Markets	7.5%	11.8%	18.4%	18.4%	0.6%	11.6%	11.5%	5.6%	3.3%	3.7%	2.3%	Oct-17
MSCI Emerging Markets Value	7.0%	9.9%	12.0%	12.0%	0.0%	8.6%	10.1%	3.7%	1.2%	2.1%	1.5%	Oct-17
J O Hambro EM Small Cap Fund	6.1%	9.4%	16.2%	16.2%	--	--	--	--	--	--	10.1%	Nov-18
MSCI Emerging Markets Small Cap	6.1%	9.5%	11.5%	11.5%	-4.7%	6.7%	5.6%	3.0%	2.4%	2.9%	8.9%	Nov-18

# Investment Manager

# Annualized Performance (Net of Fees)

Market Value: \$1,876.7 Million and 100.0% of Fund

Ending December 31, 2019

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
<b>Hedge Fund Composite</b>	<b>0.5%</b>	<b>1.8%</b>	<b>5.9%</b>	<b>5.9%</b>	<b>2.4%</b>	<b>3.4%</b>	<b>2.7%</b>	<b>2.4%</b>	<b>3.0%</b>	<b>2.4%</b>	<b>4.0%</b>	<b>Dec-05</b>
<i>HFRI FOF: Conservative Index</i>	1.0%	1.6%	6.3%	6.3%	2.7%	3.1%	2.8%	2.3%	3.2%	2.8%	2.2%	Dec-05
Pluscios	1.0%	3.0%	6.1%	6.1%	2.2%	3.3%	2.6%	1.7%	2.9%	3.5%	5.7%	Feb-09
<i>HFRI FOF: Conservative Index</i>	1.0%	1.6%	6.3%	6.3%	2.7%	3.1%	2.8%	2.3%	3.2%	2.8%	3.4%	Feb-09
Magnitude Capital	0.4%	1.3%	6.4%	6.4%	4.0%	5.2%	3.1%	3.7%	4.5%	5.1%	5.5%	Jan-06
<i>HFRI FOF: Conservative Index</i>	1.0%	1.6%	6.3%	6.3%	2.7%	3.1%	2.8%	2.3%	3.2%	2.8%	2.2%	Jan-06
Graham Absolute Return	1.4%	2.5%	9.5%	9.5%	5.9%	1.4%	3.9%	3.4%	--	--	4.6%	Dec-13
<i>HFRI Fund of Funds Composite Index</i>	1.6%	3.1%	8.4%	8.4%	2.0%	3.9%	3.0%	2.4%	3.4%	2.8%	2.5%	Dec-13
<b>Real Estate Composite</b>	<b>1.2%</b>	<b>1.4%</b>	<b>2.9%</b>	<b>2.9%</b>	<b>4.7%</b>	<b>5.4%</b>	<b>5.9%</b>	<b>7.5%</b>	<b>9.2%</b>	<b>9.8%</b>	<b>6.7%</b>	<b>Dec-81</b>
<i>NFI</i>	0.4%	1.3%	4.4%	4.4%	5.9%	6.1%	6.5%	8.0%	9.2%	10.4%	--	Dec-81
<i>CPI +5%</i>	0.3%	1.3%	7.4%	7.4%	7.2%	7.2%	7.2%	6.9%	6.7%	6.8%	--	Dec-81
<b>Open-End Real Estate Composite</b>	<b>0.4%</b>	<b>0.6%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>4.4%</b>	<b>4.9%</b>	<b>5.5%</b>	<b>7.3%</b>	<b>--</b>	<b>--</b>	<b>8.8%</b>	<b>Apr-13</b>
<i>NFI</i>	0.4%	1.3%	4.4%	4.4%	5.9%	6.1%	6.5%	8.0%	9.2%	10.4%	9.1%	Apr-13
Heitman America Real Estate	-1.0%	-1.0%	1.2%	1.2%	3.8%	4.5%	5.6%	7.3%	8.6%	--	8.6%	Jan-13
<i>NFI</i>	0.4%	1.3%	4.4%	4.4%	5.9%	6.1%	6.5%	8.0%	9.2%	10.4%	9.2%	Jan-13
JPMorgan Strategic Property Fund	1.1%	2.0%	3.4%	3.4%	5.1%	5.5%	5.9%	7.5%	--	--	--	Oct-00
<i>NFI</i>	0.4%	1.3%	4.4%	4.4%	5.9%	6.1%	6.5%	8.0%	9.2%	10.4%	6.9%	Oct-00
PRISA I	1.1%	1.1%	5.3%	5.3%	6.5%	6.5%	6.8%	8.3%	9.7%	11.1%	6.8%	Jan-01
<i>NFI</i>	0.4%	1.3%	4.4%	4.4%	5.9%	6.1%	6.5%	8.0%	9.2%	10.4%	6.9%	Jan-01
Rreef America II	1.4%	1.4%	6.3%	6.3%	6.8%	6.7%	7.1%	8.7%	10.0%	11.2%	7.3%	Oct-00
<i>NFI</i>	0.4%	1.3%	4.4%	4.4%	5.9%	6.1%	6.5%	8.0%	9.2%	10.4%	6.9%	Oct-00
UBS Trumbull Property Fund	-0.2%	-0.2%	-2.9%	-2.9%	1.5%	2.7%	3.6%	--	--	--	4.1%	Oct-15
<i>NFI</i>	0.4%	1.3%	4.4%	4.4%	5.9%	6.1%	6.5%	8.0%	9.2%	10.4%	6.9%	Oct-15
<b>Closed-End Real Estate Composite</b>	<b>6.7%</b>	<b>6.7%</b>	<b>9.0%</b>	<b>9.0%</b>	<b>7.5%</b>	<b>8.1%</b>	<b>8.0%</b>	<b>8.9%</b>	<b>--</b>	<b>--</b>	<b>11.1%</b>	<b>Apr-13</b>
<i>NFI</i>	0.5%	1.5%	6.4%	6.4%	6.6%	6.7%	7.0%	8.3%	9.1%	10.2%	9.1%	Apr-13
<b>Infrastructure Composite</b>	<b>4.2%</b>	<b>5.0%</b>	<b>20.6%</b>	<b>20.6%</b>	<b>10.4%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>11.1%</b>	<b>Apr-17</b>
<i>Dow Jones Brookfield Global Infrastructure Index</i>	5.3%	4.0%	28.7%	28.7%	8.9%	11.1%	11.5%	5.7%	8.6%	10.2%	9.0%	Apr-17
FlexShares STOXX Global Broad Infrastructure Index Fund	3.2%	4.8%	26.3%	26.3%	7.9%	--	--	--	--	--	9.2%	Apr-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	5.3%	4.0%	28.7%	28.7%	8.9%	11.1%	11.5%	5.7%	8.6%	10.2%	9.0%	Apr-17
IFM Global Infrastructure L.P.	5.2%	5.2%	14.6%	14.6%	--	--	--	--	--	--	18.1%	Mar-18
<i>BBgBarc US Aggregate TR</i>	-0.1%	0.2%	8.7%	8.7%	4.3%	4.0%	3.7%	3.0%	2.7%	3.7%	5.9%	Mar-18
<i>CPI +4%</i>	0.2%	1.1%	6.4%	6.4%	6.2%	6.2%	6.2%	5.9%	5.7%	5.8%	5.8%	Mar-18

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$1,876.7 Million and 100.0% of Fund

**Ending December 31, 2019**

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
<b>Private Equity Composite</b>	<b>3.8%</b>	<b>4.3%</b>	<b>14.1%</b>	<b>14.1%</b>	<b>12.1%</b>	<b>12.8%</b>	<b>10.2%</b>	<b>10.2%</b>	<b>9.5%</b>	<b>9.5%</b>	<b>6.6%</b>	<b>Dec-07</b>
<i>Cambridge Associates All PE</i>	<i>1.7%</i>	<i>5.1%</i>	<i>15.0%</i>	<i>15.0%</i>	<i>12.5%</i>	<i>14.7%</i>	<i>13.4%</i>	<i>12.2%</i>	<i>13.2%</i>	<i>13.3%</i>	<i>9.4%</i>	<i>Dec-07</i>
<b>Open-End Private Equity Composite</b>	<b>3.2%</b>	<b>4.4%</b>	<b>16.3%</b>	<b>16.3%</b>	<b>11.4%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>11.4%</b>	<b>Dec-17</b>
<i>MSCI World</i>	<i>3.0%</i>	<i>8.6%</i>	<i>27.7%</i>	<i>27.7%</i>	<i>8.0%</i>	<i>12.6%</i>	<i>11.3%</i>	<i>8.7%</i>	<i>10.6%</i>	<i>9.5%</i>	<i>8.0%</i>	<i>Dec-17</i>
Partners Group Private Equity Master Fund LLC	3.7%	4.9%	15.7%	15.7%	11.5%	--	--	--	--	--	11.5%	Dec-17
<i>MSCI World</i>	<i>3.0%</i>	<i>8.6%</i>	<i>27.7%</i>	<i>27.7%</i>	<i>8.0%</i>	<i>12.6%</i>	<i>11.3%</i>	<i>8.7%</i>	<i>10.6%</i>	<i>9.5%</i>	<i>8.0%</i>	<i>Dec-17</i>
Partners Group Private Equity CIT	2.0%	3.5%	17.7%	17.7%	11.2%	--	--	--	--	--	11.2%	Dec-17
<i>MSCI World</i>	<i>3.0%</i>	<i>8.6%</i>	<i>27.7%</i>	<i>27.7%</i>	<i>8.0%</i>	<i>12.6%</i>	<i>11.3%</i>	<i>8.7%</i>	<i>10.6%</i>	<i>9.5%</i>	<i>8.0%</i>	<i>Dec-17</i>



# Employees' Retirement Plan

## Fee Schedule

Market Value: \$1,876.7 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Median <sup>2</sup>
Core Plus Fixed Income	Amalgatrust	0.30% on the first \$25 million 0.285% on the next \$25 million 0.20% on the Balance	0.28% \$160,875	0.30%
Core Fixed Income	Baird Advisors	0.22% on the first \$50 million 0.20% on the next \$50 million 0.15% on the Balance	0.22% \$125,424	0.26%
Core Fixed Income	Rhumblin Core Bond Pooled Index Fund	0.0175% on the Balance	0.02% \$9,142	0.06%
Global Fixed Income	Franklin Templeton Global Bond	0.47% on the first \$50 million 0.36% on the next \$50 million 0.30% on the Balance	0.47% \$239,029	0.34%
EM Fixed Income	MetLife Investment Management EMD	0.65% on the Balance	0.65% \$369,481	0.60%
Senior Secured Loans	Symphony	0.50% on the Balance	0.50% \$202,674	0.50%
<b>Total Investment Management Fees</b>			<b>0.35% \$1,106,626</b>	<b>0.34%</b>

<sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

<sup>2</sup> Source: 2019 Marquette Associates Investment Management Fee Study.

# Employees' Retirement Plan

## Fee Schedule

Market Value: \$1,876.7 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Median <sup>2</sup>
Large-Cap Core	Northern Trust S&P 500	0.005% on the Balance	0.01% \$6,935	0.03%
Large-Cap Value	Edgar Lomax	0.54% on the first \$50 million 0.40% on the next \$25 million 0.35% on the next \$25 million 0.30% on the Balance	0.49% \$371,398	0.50%
Large-Cap Value	Paradigm	0.50% on the first \$50 million 0.40% on the next \$50 million 0.30% on the next \$50 million 0.20% on the Balance	0.46% \$370,536	0.50%
Large-Cap Value	Rhumblin Russell 1000 Value	0.0175% on the Balance	0.02% \$7,788	0.06%
Mid-Cap Value	Denali	0.75% on the first \$25 million 0.70% on the next \$25 million 0.65% on the Balance	0.71% \$453,674	0.64%
Small-Cap Value	Ariel	0.60% on the first \$10 million 0.50% on the next \$10 million 0.40% on the Balance	0.46% \$223,355	0.90%
Small-Cap Value	Channing	1.00% on the first \$25 million 0.90% on the next \$25 million 0.80% on the Balance	0.99% \$265,208	0.90%
Small-Cap Core	Rhumblin S&P 600	0.0175% on the Balance	0.02% \$2,825	0.05%
Mid-Cap Core	Xponance S&P 400 Index	0.03% on the Balance	0.03% \$10,379	0.06%
<b>Total Investment Management Fees</b>			<b>0.32%</b>	<b>0.37%</b>

<sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

<sup>2</sup> Source: 2019 Marquette Associates Investment Management Fee Study.

# Employees' Retirement Plan

## Fee Schedule

Market Value: \$1,876.7 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Median <sup>2</sup>
Non-U.S. Large-Cap Core	Brown Capital	0.75% on the first \$50 million 0.65% on the next \$50 million 0.55% on the next \$50 million 0.50% on the next \$150 million 0.45% on the Balance	0.69% \$723,073	0.58%
Non-U.S. Small-Cap Core	LSV	1.00% on the first \$25 million 0.90% on the next \$25 million 0.80% on the Balance	0.94% \$505,116	0.85%
Non-U.S. Large-Cap Core	Northern Trust ACWI ex US	0.035% on the Balance	0.04% \$11,606	0.10%
Emerging Markets	Northern Trust Emerging Markets	0.10% on the Balance	0.10% \$37,545	0.20%
Emerging Markets	ARGA Emerging Markets Equity	0.97% on the Balance	0.97% \$605,755	0.85%
EM Small-Cap	J O Hambro EM Small Cap Fund	0.70% on the Balance Plus 15% Performance Fee, Capped at 0.95%	0.70% \$341,637	1.18%
<b>Total Investment Management Fees</b>			<b>0.65%</b> <b>\$2,224,733</b>	<b>0.67%</b>

<sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

<sup>2</sup> Source: 2019 Marquette Associates Investment Management Fee Study.